

Name: _____

Date: _____

FOIL when $A \neq 1$ SLTN (version 105)

FOIL the expressions shown below:

1. $(-9x - 8)(-8x + 9)$

$$\begin{aligned} &(-9)(-8)x^2 + (-9)(9)x + (-8)(-8)x + (-8)(9) \\ &(72)x^2 + (-81)x + (64)x + (-72) \\ &72x^2 - 17x - 72 \end{aligned}$$

2. $(7x - 3)(-4x - 8)$

$$\begin{aligned} &(7)(-4)x^2 + (7)(-8)x + (-3)(-4)x + (-3)(-8) \\ &(-28)x^2 + (-56)x + (12)x + (24) \\ &-28x^2 - 44x + 24 \end{aligned}$$

3. $(7x - 2)(8x + 2)$

$$\begin{aligned} &(7)(8)x^2 + (7)(2)x + (-2)(8)x + (-2)(2) \\ &(56)x^2 + (14)x + (-16)x + (-4) \\ &56x^2 - 2x - 4 \end{aligned}$$

4. $(-8x + 4)(2x + 6)$

$$\begin{aligned} &(-8)(2)x^2 + (-8)(6)x + (4)(2)x + (4)(6) \\ &(-16)x^2 + (-48)x + (8)x + (24) \\ &-16x^2 - 40x + 24 \end{aligned}$$

5. $(7x + 3)(-4x + 2)$

$$\begin{aligned} &(7)(-4)x^2 + (7)(2)x + (3)(-4)x + (3)(2) \\ &(-28)x^2 + (14)x + (-12)x + (6) \\ &-28x^2 + 2x + 6 \end{aligned}$$

FOIL the expressions shown below:

6. $(2x + 3)(-3x - 5)$

$$\begin{aligned}(2)(-3)x^2 + (2)(-5)x + (3)(-3)x + (3)(-5) \\ (-6)x^2 + (-10)x + (-9)x + (-15) \\ -6x^2 - 19x - 15\end{aligned}$$

7. $(-7x + 7)(-7x - 9)$

$$\begin{aligned}(-7)(-7)x^2 + (-7)(-9)x + (7)(-7)x + (7)(-9) \\ (49)x^2 + (63)x + (-49)x + (-63) \\ 49x^2 + 14x - 63\end{aligned}$$

8. $(-6x + 5)(3x + 5)$

$$\begin{aligned}(-6)(3)x^2 + (-6)(5)x + (5)(3)x + (5)(5) \\ (-18)x^2 + (-30)x + (15)x + (25) \\ -18x^2 - 15x + 25\end{aligned}$$

9. $(-8x + 8)(5x + 4)$

$$\begin{aligned}(-8)(5)x^2 + (-8)(4)x + (8)(5)x + (8)(4) \\ (-40)x^2 + (-32)x + (40)x + (32) \\ -40x^2 + 8x + 32\end{aligned}$$

10. $(8x + 3)(5x + 5)$

$$\begin{aligned}(8)(5)x^2 + (8)(5)x + (3)(5)x + (3)(5) \\ (40)x^2 + (40)x + (15)x + (15) \\ 40x^2 + 55x + 15\end{aligned}$$